

A NEW SPECIES OF *STRONGYLOGASTER* (HYMENOPTERA: TENTHREDINIDAE) FROM NORTH AMERICA¹

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ABSTRACT: *Strongylogaster lata*, n. sp., is described from specimens collected at two sites in Maryland. This species is the first North American representative of a species group previously known only from eastern Asia. It is separated from the North American species of the genus as well as four Asian species. The female sheath and lancet are illustrated.

North American *Strongylogaster* were last revised by Smith (1969) who treated 11 species. Known hosts are ferns. Specimens recently collected in the mid-Atlantic region represent the new species described here. It belongs to a species group of *Strongylogaster* previously known only from four species from eastern Asia and is more closely allied to them than to North American species. We describe this species because it is an important discovery in North America and an integral part of ongoing studies of relationships of world *Strongylogaster* by the junior author.

Strongylogaster lata Smith and Naito, NEW SPECIES

(Figs. 1-4)

Female Holotype. - Length, 7.0 mm. Black with small spot at center of clypeus, central spot on lateral pronotum, and lateral posterior margin of pronotum brownish; 9th abdominal segment yellowish; tegula and legs yellowish white to yellow with following black: basal 2/3 coxae, basal 1/3 to 1/2 of femora on inner and outer surface, and outer surface of tarsi. Wings hyaline to very slightly dusky; veins and stigma black except basal fourth of costa yellowish. Antenna 2.3X head width. Head and clypeus finely rugose, meshed, and dull, with smooth and shinier areas on supra-clypeal area and around and between ocelli; clypeus truncate; malar space as broad as interantennal distance; deep postorbital groove present; postocellar area 3X broader than long and with deep pit on each side. Thorax with pronotum finely rugose, meshed, and dull; subshining with fine surface sculpture on rest of thorax except mesosternum, cervical sclerites, mesepimeron, metapleuron, lateral areas of mesonotal lateral lobes, and posttergite shinier than other parts. Abdomen shining with very fine surface sculpture. Forewing without anal crossvein. Hindwing with anal cell petiolate. Sheath long and slender in lateral view, uniformly slender in dorsal view (Figs. 1, 2); lancet as in Figs 3, 4, without ventral teeth and with several spines on annuli between segments.

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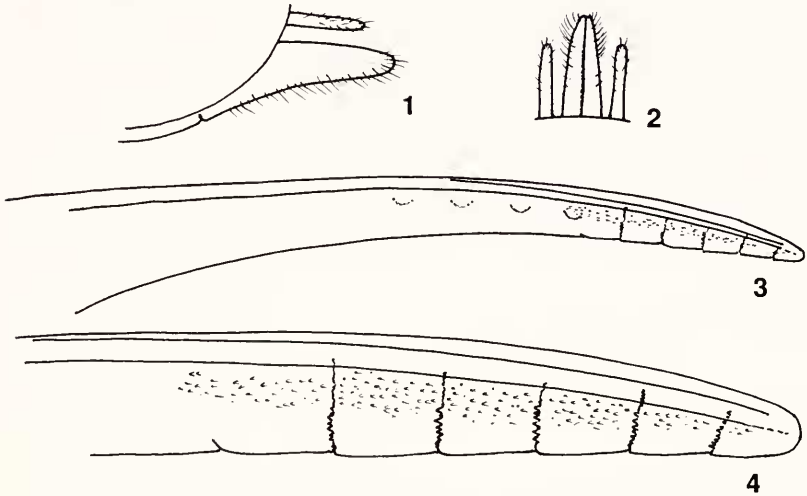
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Male. - Unknown.

Holotype. - Female, labeled "MARYLAND: Garrett Co., Finzel Swamp, 2 km S Finzel, Malaise trap, 39°38'N, 79°00'W, 30-VI-9-VII-1992, Barrows & Smith," "Malaise trap #2." Deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Paratype. - MARYLAND: Prince Georges Co., BARC, 24-V-3-VI-1991, C. Allen & C. Lowe, Beltsville Agric. Research Center, Malaise trap #1 (1 female, deposited with holotype). BARC = Beltsville Agricultural Research Center.



Figs. 1-4, *Strongylogaster lata*. 1. Sheath, lateral view. 2. Sheath, dorsal view. 3. Entire lancet. 4. Apical portion of lancet.

DISCUSSION

For separation from other North American species of *Strongylogaster*, *S. lata* will key to couplet 6 in Smith's (1969) key, the couplet differentiating *S. remota* Rohwer, and *S. polita* Cresson. The narrow and pointed simple sheath and black mesothorax and abdomen place it closest to *S. polita*. It differs from both *S. remota* and *S. polita* by the dull, roughened head and thorax, broad malar space, truncate clypeus, presence of a postorbital groove, short postocellar area, petiolate anal cell of the hindwing, and longer, more slender sheath. Both *S. polita* and *S. remota* have the head and thorax mostly smooth and shining; the malar space less than half the interantennal distance; clypeus with a slight central emargination; lack a postorbital groove; have a longer postocellar area (about $1\frac{1}{3}X$ broader than long); have a sessile anal cell in

the hindwing; have a shorter, either rounded or acute, sheath (see Smith 1969, figs. 42, 43, 50); and have shorter, stouter lancets (see Smith, 1969, figs. 75, 77).

Strongylogaster lata is most closely related to and belongs with four species from eastern Asia which form a distinct group in *Strongylogaster*: *S. osmundae* (Takeuchi) and *S. tambensis* Naito of Japan (Naito, 1980); *S. minuta* Naito and Huang from Sichuan, China (Naito and Huang, 1988); and *S. verzhutskii* Naito from Irkutsk, Russia (Naito, 1990). All have in common the rough sculpturation of the head and usually the thorax, postorbital groove, truncate clypeus, broad malar space, short postocellar area, long and slender simple sheath, and petiolate anal cell of the hindwing. *Strongylogaster tambensis* (Naito, 1980, fig. 26), *S. minuta* (Naito and Huang, 1988, Fig. 8), and *S. verzhutskii* (Naito, 1990, Fig. 4) each have ventral teeth on the lancet and lack strong spines on the annuli separating the segments. The lancet of *Strongylogaster osmundae* (Naito, 1980, fig. 25), however, is very similar to the lancet to *S. lata* as both lack ventral teeth and have rather strong spines on the annuli. However, *S. osmundae* has the head, thorax, and abdomen black with only the tegula whitish; supraclypeal, interantennal area, and ocellar area sculptured as the rest of the head; a shinier mesopleuron and mesonotum; the postocellar area about 2X broader than long; and the hairs on the sheath half or less the length of the hairs on the sheath of *S. lata*.

The paratype from the Beltsville Agricultural Research Center has the head missing, but all features of the remaining parts leave little doubt it is the same species as the specimen from Finzel. It differs from the holotype in coloration as follows: pronotum mostly yellowish laterally, coxae mostly whitish except for extreme bases.

Both specimens were collected in swampy areas. The trap at Finzel Swamp was at the edge of the swamp among various bushes and sedges. The trap at the Beltsville Agricultural Research Center was at the edge of a small lake in a coniferous forest habitat. The host plant for *S. osmundae* in Japan is *Osmunda japonica* Thunb. and that of *S. tambensis* is *Dryopteris sabaei* (Fr. and Sav.) C. Christensen (Naito, 1980). Three species of *Osmunda* and two species of *Dryopteris* are known from Finzel (Brown, 1982) and two species of *Osmunda* and two species of *Dryopteris* are known from the Beltsville Agricultural Research Center (Kirkbride, correspondence). At both sites, some plants of *Osmunda* as well as other ferns were close to the traps.

Etymology. - The species name is from the Latin adjective *latus*, with reference to the very broad malar space which is significant for separating *S. lata* from other North American species.

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